



Attorney's Docket No. 032901-039

Patent

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of)
Samuel Weiss, et al.) Group Art Unit: 1614
Application No.: 10/084,671) Examiner: Unassigned
Filed: February 28, 2002)
For: ESTROGEN INDUCED NEURAL STEM CELL)
PROLIFERATION)

**INFORMATION DISCLOSURE STATEMENT
TRANSMITTAL LETTER**

Assistant Commissioner for Patents
Washington, D.C. 20231

Sir:

Enclosed is an Information Disclosure Statement and accompanying form PTO-1449 for the above-identified patent application.

- ☒ [X] No additional fee for submission of an IDS is required.
- ☐ [] The fee of \$180.00 (126) as set forth in 37 C.F.R. § 1.17(p) is also enclosed.
- ☐ [] A certification under 37 C.F.R. § 1.97(e) is also enclosed.
- ☐ [] A certification under 37 C.F.R. § 1.97(e), and the fee of \$180.00 (126) as set forth in 37 C.F.R. § 1.17(p) are also enclosed.
- ☐ [] Charge \$_____ to Deposit Account No. 02-4800 for the fee due.
- ☐ [] A check in the amount of \$_____ is enclosed for the fee due.

The Commissioner is hereby authorized to charge any appropriate fees under 37 C.F.R. §§ 1.16, 1.17 and 1.21 that may be required by this paper, and to credit any overpayment, to Deposit Account No. 02-4800. This paper is submitted in duplicate.

Respectfully submitted,

BURNS, DOANE, SWECKER & MATHIS, L.L.P.

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By: Ping F. Hwang
Registration No. 44,164

Date: May 17, 2002



Attorney's Docket No. 032901-028

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CELL PROLIFERATION)

INFORMATION DISCLOSURE STATEMENT

Assistant Commissioner for Patents
Washington, D.C. 20231

Sir:

In accordance with the duty of disclosure as set forth in 37 C.F.R. § 1.56, Applicants hereby submit the following information in conformance with 37 C.F.R. §§ 1.97 and 1.98. Pursuant to 37 C.F.R. § 1.98, a copy of each of the documents cited is enclosed.

1. U.S. Patent No. 5,554,601, Simpkins et al., issued September 10, 1996
2. U.S. Patent No. 5,750,376, Weiss et al., issued May 12, 1998
3. U.S. Patent No. 5,843,934, Simpkins, issued December 1, 1998
4. U.S. Patent No. 5,851,832, Weiss et al., issued December 22, 1998
5. U.S. Patent No. 5,980,885, Weiss et al., issued November 9, 1999
6. U.S. Patent No. 6,334,998, Uckun et al., issued January 1, 2002
7. International Publication No. WO 01/10430, published February 15, 2001
8. Alonso, G., "Prolonged corticosterone treatment of adult rats inhibits the proliferation of oligodendrocyte progenitors present throughout white and gray matter regions of the brain", *GLIA* **31**: 219-231 (2000).
9. Baniahmad et al., "Enhancement of human estrogen receptor activity by SPT6: a potential coactivator", *Mol. Endocrinol.* **9**(1):34-43 (1995).
10. Doetsch, F., et al., "Subventricular Zone Astrocytes are Neural Stem Cells in the Adult Mammalian Brain", *Cell* **97**:703-716 (1999)
11. Hidalgo A. et al., "Estrogen and non-estrogenic ovarian influences combine to promote the recruitment and decrease the turnover of new neurons in the adult female canary brain", *J. Neurobiol.* **27**(4): 470-487 (1995).

12. Seri, B. et al., "Astrocytes give rise to new neurons in the adult mammalian hippocampus", *J. Neuroscience*, 21(19):7153-7160 (2001)
13. Smith, M.T., et al., Increased number of BrdU-labeled neurons in the rostral migratory stream of the estrous prairie vole. *Horm. Behav* 39(1): 11-21 (2001)
14. Tanapat, P. et al., "Estrogen stimulates a transient increase in the number of new neurons in the dentate gyrus of the adult female rat", *J. Neuroscience* **19(14)**: 5792-5801 (1999).
15. Wade, S.B., et al., Overlapping and divergent actions of estrogen and the neurotrophins on cell fate and p53-dependent signal transduction in conditionally immortalized cerebral cortical neuroblasts. *J. Neurosci* 19(16): 6994-7006 (1999)
16. Zhang, L. et al., Testosterone and estrogen affect neuronal differentiation but not proliferation in early embryonic cortex of the rat: the possible roles of androgen and estrogen receptors. *Neurosci Lett* 281(1):57-60 (2000)

The documents are being submitted within 3 months from the filing date of this application. Therefore, no fee or statement is required under 37 C.F.R. § 1.97(b).

By citing the above references, Applicants do not acquiesce or admit that any of these documents is "prior art" under 35 U.S.C. Applicants specifically reserve the right, where appropriate, to antedate any of the cited documents by an appropriate showing under 37 C.F.R. §1.131, §1.604, §1.608 or any other suitable means.

To assist the Examiner, the documents are listed on the attached form PTO-1449. It is respectfully requested that an Examiner initialed copy of this form be returned to the undersigned.

Respectfully submitted,

BURNS, DOANE, SWECKER & MATHIS, L.L.P.

By: _____

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Alexandria, Virginia 22313-1404
(650) 622-2300

Date: May 17, 2002

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| Substitute for form 1449A PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT | ATTORNEY'S DKT NO. 032901-039 | APPLICATION NO. 10 084 671 |
| | APPLICANT Weiss et al. | |
| | FILING DATE February 28, 2002 | GROUP 1614 |
| | | |

U.S. PATENT DOCUMENTS

| Examiner Initials | U.S. Patent Document | | Name of Patentee or Applicant of Cited Document | Date of Publication (MM-DD-YYYY) |
|----------------------|----------------------|-------------------------|--|-------------------------------------|
| | Number | Kind Code (if known) | | |
| | 5,554,601 | | Simpkins et al. | September 10, 1996 |
| | 5,750,376 | | Weiss et al. | May 12, 1998 |
| | 5,843,934 | | Simpkins | December 1, 1998 |
| | 5,851,832 | | Weiss et al. | December 22, 1998 |
| | 5,980,885 | | Weiss et al. | November 9, 1999 |
| | 6,334,998 | | Uckun et al. | January 1, 2002 |
| | | | | |

FOREIGN PATENT DOCUMENTS

| Examiner Initials | Foreign Patent Document | | Country | Date of Publication (MM-DD-YYYY) | Translation | |
|----------------------|-------------------------|-------------------------|---------|-------------------------------------|-------------|----|
| | Number | Kind Code (if known) | | | Yes | no |
| | WO 01/10430 | | PCT | February 15, 2001 | | |
| | | | | | | |
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NON PATENT LITERATURE DOCUMENTS

| Examiner Initials | Include name of author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. |
|-----------------------|---|
| | Alonso, G., "Prolonged corticosterone treatment of adult rats inhibits the proliferation of oligodendrocyte progenitors present throughout white and gray matter regions of the brain", <i>GLIA</i> 31 : 219-231 (2000). |
| | Baniahmad et al., "Enhancement of human estrogen receptor activity by SPT6: a potential coactivator", <i>Mol. Endocrinol.</i> 9 (1):34-43 (1995). |
| | Doetsch, F., et al., "Subventricular Zone Astrocytes are Neural Stem Cells in the Adult Mammalian Brain", <i>Cell</i> 97 :703-716 (1999) |
| | Hidalgo A. et al., "Estrogen and non-estrogenic ovarian influences combine to promote the recruitment and decrease the turnover of new neurons in the adult female canary brain", <i>J. Neurobiol.</i> 27 (4): 470-487 (1995). |
| | Seri, B. et al., "Astrocytes give rise to new neurons in the adult mammalian hippocampus", <i>J. Neuroscience</i> , 21 (19):7153-7160 (2001) |
| | Smith, M.T., et al., Increased number of BrdU-labeled neurons in the rostral migratory stream of the estrous prairie vole. <i>Horm. Behav</i> 39 (1): 11-21 (2001) |
| | Tanapat, P. et al., "Estrogen stimulates a transient increase in the number of new neurons in the dentate gyrus of the adult female rat", <i>J. Neuroscience</i> 19 (14): 5792-5801 (1999). |
| | Wade, S.B., et al., Overlapping and divergent actions of estrogen and the neurotrophins on cell fate and p53-dependent signal transduction in conditionally immortalized cerebral cortical neuroblasts. <i>J. Neurosci</i> 19 (16): 6994-7006 (1999) |
| | Zhang, L. et al., Testosterone and estrogen affect neuronal differentiation but not proliferation in early embryonic cortex of the rat: the possible roles of androgen and estrogen receptors. <i>Neurosci Lett</i> 281 (1):57-60 (2000) |
| | |
| Examiner Signature | Date Considered |

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. SEND TO: Assistant Commissioner for Patents, Washington, D.C. 20231.